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**LIST OF PARTIES PURSUANT TO RULES 14.1(b)
AND 29.6**

The names of all parties in the court whose judgment is sought to be reviewed appear in the caption of this Brief.

Respondent has the following parent and subsidiary companies:

Freedom Chemical Company (parent)
A Chem (UK) Limited (subsidiary)

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BRIEF FOR RESPONDENT

**CONSTITUTIONAL AND STATUTORY
PROVISIONS INVOLVED**

Pertinent Constitutional and Statutory provisions are set forth in an Appendix to this Brief.

COUNTERSTATEMENT OF THE CASE

This action involves the infringement of a unique and valuable patent owned by Respondent, Hilton Davis. J.A. 6-38. The patent covers an innovative complex chemical process for producing two specific synthetic red and yellow food dyes: FD&C (food, drug and cosmetic) Red 40 and FD&C Yellow 6.¹ Pet. App. 2a. The patented process was the first to successfully purify these food dyes to the extremely high purity required by the FDA for human consumption without the use of a costly, laborious and environmentally undesirable step known as "salting out." Pet. App. 2a; J.A. 15. "Salting out" involves adding large quantities of rock salt to cause the dye to crystallize out of solution, filtering the crystalline dye in large filter presses to produce a semi-solid press cake, manually scraping the press

¹ These dyes are widely used as colorants in many popular food products including M&Ms, Kool Aid and numerous soft drinks. T.R. 65-67. Petitioner and Respondent are the only domestic producers of these important dyes. C.A. Jt. App. 113-15.

cake from the filter, subjecting the press cake to a series of successively more dilute salt solution washes, redissolving the press cake in water, and finally evaporating the solution to produce the dry dye. J.A. 12-16; C.A. Jt. App. 139-50, 3224-25. The patented Hilton Davis process eliminates most of these steps. J.A. 15.

In 1982, the inventors of the patented process, Drs. Cook and Rebhahn, conceived a revolutionary approach using a membrane separation process, now known as "ultrafiltration," to separate the impurities in the dye solution from the dye molecules without "salting out." Pet. App. 2a-3a.²

Respondent filed its initial patent application based on extensive tests of the new process carried out in October 1982 and January 1983. Pet. App. 3a. After extensive further in-house testing, Respondent filed a continuation-in-part application claiming a broader range of membranes. *Id.*; C.A. Jt. App. 1427-28, 1520-21.

During prosecution of the patent application, the Patent Office initially rejected the claims as obvious in view of the prior art Booth patent. J.A. 78-83. To distinguish its invention from the Booth patent, Respondent noted four important distinctions: (1) the enormous differences between the molecular weights of the dyes purified by Booth and those purified by Respondent's process; (2) the intentional addition of salt to the solution required by the Booth process, antithetical to the elimination of "salting out"; (3) the very high pH ranges deliberately required in the Booth process (above 9.0 and preferably 11-13), in contrast to the relatively

² Petitioner does not challenge the finding below that Respondent invented the patented process.

low pH used in Respondent's process (below 9.0); and (4) the very low pressures used in the Booth process (25-200 p.s.i.g., preferably 75-125 p.s.i.g.), in contrast to the much higher pressures required by Respondent's process (200-400 p.s.i.g.). J.A. 96-108. After that combination of distinguishing features was pointed out to the Patent Examiner, the patent issued in 1985.³ J.A. 109.

Petitioner developed its infringing process on a parallel, but not completely independent, path. In 1978, Petitioner unsuccessfully experimented with the Booth process, which used "salting out," and completely abandoned its process development efforts. C.A. Jt. App. 293-95, 2996-97. In August 1982, Petitioner unsuccessfully tested a filtration process which continued to incorporate a "salting out" step. Pet. App. 5a; C.A. Jt. App. 297, 1178, 1447, 2177, 2439-56. After this failure, Petitioner, unable to produce a viable process, again abandoned work on filtering Red 40 and Yellow 6 dyes until 1986. Pet. App. App. 5a; J.A. 150-53; C.A. Jt. App. 1026-27, 1044, 1144-46.

After four years of inactivity, Petitioner unexpectedly demonstrated a process which eliminated the "salting out" step by using Petitioner's patented process. Pet. App. 4a. This sudden success was no coincidence. Petitioner's previously unsuccessful process had been modified using Respondent's confidential information misappropriated by a third party (Osmonics) to use the same critical membranes,

³ In its opinion, the court below states that "[t]he inventors added the phrase 'at a pH from approximately 6.0 to 9.0' during prosecution to distinguish [the Booth patent]." Pet. App. 4a. This statement is not accurate. The Court later correctly explained that the pH range was added "to avoid the disclosure in the Booth patent of an ultrafiltration process operating at a pH higher than 9." Pet. App. 24a.

process parameters and equipment developed and used by Respondent. C.A. Jt. App. 522-23, 545, 1264, 1269-73, 3074-85. Thus there was clear evidence presented below that Petitioner's process was not developed independently, but was derived in its most critical and necessary attributes from Respondent's process through breach of secrecy by Osmonics.

Petitioner's deliberate use of the patented process to sell enormous quantities of dyes made by the infringing process continued even after learning of Respondent's patent and being warned of infringement. Petitioner made no attempt to design around Respondent's patent until a permanent injunction was entered, after which it immediately modified its process in an attempt to avoid infringement. See Exhibit A to Brief of Appellee in the court below; C. A. Jt. App. 895-900, 912-13.

At trial, the jury was instructed that it could find infringement under the doctrine of equivalents if the accused process performed substantially the same function, way and result as the patented process. Pet. App. J.A. 59-60. The jury found, and the trial court and the court below affirmed, that the Petitioner's process used a purification technique for purifying Red 40 and Yellow 6 dyes having steps which were the same as or equivalent to those claimed in Respondent's patent, e.g., operating at a pH of 5-6 (the equivalent of the claimed pH of 6-9) and a pressure of 200-500 p.s.i.g. (the equivalent of the claimed 200-400 p.s.i.g.). Pet. App. 23a-24a, 165a-167a; J.A. 69.⁴

⁴ Petitioner actually operated its process near, if not at, pH 6, and in many instances with a pressure within the range of 200-400 p.s.i.g., supporting a finding of *literal* infringement of these claim
(continued...)

In Respondent's patented process, the "function" of the pH is to: (1) prevent damage to the membrane; (2) produce a more or less neutral product as required by the FDA; (3) be compatible with the chemistry of the process; and (4) destroy triazine.⁵ Pet. App. 23a; J.A. 112-16; C.A. Jt. App. 230-32, 366-76. Petitioner operated its infringing process with a pH meeting these functions. Pet. App. 23a. As to the "way" requirement, the pH is adjusted in both the accused and patented processes by addition of an acid to obtain the desired pH value. J.A. 28-29; C.A. Jt. App. 2178, 2793, 2798, 2812. The "result" of utilizing the appropriate pH is that the membrane is not destroyed, the process operates to produce FDA certifiable dyes, and triazine is destroyed — results achieved in the infringing process. C.A. Jt. App. 231, 363-65, 1295, 2174, 2178. Consequently, the test for infringement under the doctrine of equivalents is clearly met. Pet. App. 23a.⁶ While Petitioner creates the misleading impression that its process is fundamentally

⁴(...continued)

limitations. Pet. App. 23a; J.A. 117-22; C.A. Jt. App. 372-75, 552, 560, 864-66, 1557, 2439-56, 2998-3000, 3012-13, 3222.

⁵ Petitioner argues that it avoids infringement by operating at a lower pH which would cause so-called "foaming" in the Hilton Davis process. If one of the functions of pH is to prevent "foaming," the infringing process accomplishes that function. Moreover, the patented process was successfully tested to pH values as low as 2.2 with no effect on the process because of "foaming." J.A. 111, 143; C.A. Jt. App. 232, 1099, 1406-7, 1410-11, 1477, 1516-17, 3108-45.

⁶ The evidence also showed that other claim requirements (e.g., pressure, pore size and acid) were equivalently met in the infringing process. See, e.g., Pet. App. 23a-24a; C.A. Jt. App. 164-66, 228-29, 360-62. Petitioner does not challenge the finding of equivalence of pore size and acid.

different from Respondent's, the jury, the District Court and the *en banc* court below all found otherwise: the differences between the patented and infringing process were no more than insubstantial.⁷ Pet. App. 2a, 23a.

The jury, after hearing extensive evidence offered over nine days with nine expert and technical fact witnesses and being properly instructed, deliberated for several days, and returned a verdict supported by nine special verdicts, finding that Respondent's patent remained valid, and that Petitioner infringed under the doctrine of equivalents⁸ (although not willfully), and was liable for 20% of Respondent's request for damages. Pet. App. 5a; J.A. 41-70; C.A. Jt. App. 38-39, 2015-19.

The trial court denied Petitioner's post-trial motions, ruling independently that Petitioner's process infringed under the doctrine of equivalents.⁹ Pet. App. 5a, 165a-166a, 170a-171a. The court also entered a narrowly drawn permanent injunction that permitted Petitioner to continue

⁷ Petitioner's approach is sometimes known as "tickling" the patent — a practice used by unscrupulous competitors to come as close as possible to a patented invention to obtain its benefits by making unimportant and insubstantial changes and substitutions — a practice condemned by this Court in *Graver Tank Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950). See Pet. App. 22a.

⁸ Infringement under the doctrine of equivalents is a question of fact. *Graver Tank*, 339 U.S. at 609. Since two courts have already considered these facts, they cannot be reconsidered. *Graver Tank & Mfg. Co. v. Linde Air Prods., Co.*, 336 U.S. 271, 275 (1949) [*Graver Tank* I].

⁹ In a separate opinion, a panel of the court below affirmed the District Court's decisions on post-trial motions involving validity. Pet. App. 153a-159a. Petitioner does not seek review of those rulings. Pet. Br. at 7 n.6.

practicing a process for purifying Red 40 and Yellow 6 at a pressure above 500 p.s.i.g. or at a pH above 9.01.¹⁰ Pet. App. 5a, 172a-173a.

A panel of the court below heard oral argument on July 9, 1993. Subsequently, the court decided *sua sponte* to hear the appeal *en banc* to answer three specific questions. Pet. App. 5a.¹¹ On the merits, the court below affirmed *per curiam* "[b]ecause substantial evidence supports the jury verdict of infringement." *Id.* at 2a, 32a.

¹⁰ Petitioner was enjoined "from infringing claims 1, 2, 3, 13 or 14 of [the Hilton Davis patent] by selling or manufacturing FD&C Red 40 and FD&C Yellow 6 made at a pH less than 9.01 and at pressures at the input to the first membrane of less than 500 p.s.i.g." Pet. App. 172a.

¹¹ (1) Does a finding of infringement under the Doctrine of Equivalents require anything in addition to proof of the facts that there are the same or substantially the same (a) function, (b) way, and (c) result, the so-called triple identity test of *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605 (1950), and cases relied on therein? If yes, what? The court answered that "the finding of infringement under the doctrine of equivalents requires proof of insubstantial differences between the claimed and accused products or processes." Pet. App. 17a. (2) Is the issue of infringement under the Doctrine of Equivalents an equitable remedy to be decided by the Court, or is it, like literal infringement, an issue of fact to be submitted to the jury in a jury case? The court answered that "infringement under the doctrine of equivalents is an issue of fact to be submitted to the jury in a jury trial with proper instructions, and to be decided by the judge in a bench trial." *Id.* (3) Is application of the Doctrine of Equivalents by the trial court to find infringement of the patentee's right to exclude, when there is no literal infringement of the claim, discretionary in accordance with the circumstances of the case? The court answered that "[t]he trial judge does not have discretion to choose whether to apply the doctrine of equivalents when the record shows no literal infringement." *Id.* at 18a.

SUMMARY OF ARGUMENT

The judgment finding Petitioner liable for patent infringement under the doctrine of equivalents should be affirmed. The Federal Circuit, exclusively charged by Congress to unify the patent law, after spirited debate, with benefit of the enlightened wisdom of its full *en banc* membership, and with the assistance of numerous *amici curiae*, faithfully restated the principle of the doctrine of equivalents defined in *Graver Tank & Manufacturing Co. v. Linde Air Products Co.* and its predecessors as wise and pragmatic law, fully consistent with the Patent Act of 1952 and Article I § 8, cl. 8 of the Constitution. Petitioner, by challenging the doctrine of equivalents itself, seeks to destroy one of the most important bulwarks underlying our country's patented technology. To affirm the decision below assures the continuance of this necessary rule of law. To change the law returns our patent system to the dark ages where anyone can "practice a fraud on a patent" simply by making "unimportant and insubstantial changes" — an anathema to this Court's wisdom of *Graver Tank*.

The court below correctly held that the doctrine of equivalents was neither judicially repealed nor affected by the 1952 Patent Act. Further, this Court has recently confirmed in *Markman v. Westview Instruments, Inc.* that patent infringement incorporates not only literal infringement but also infringement under the doctrine of equivalents.

Previously, in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, this Court determined that the infringement provisions of the 1952 Patent Act left intact the entire body of case law on patent infringement. Thus, the guiding principles of the doctrine of equivalents laid down in *Graver Tank* and its predecessors were incorporated *sub silentio* in the 1952 Act. Since that time, despite continual

tinkering with the patent laws, Congress has not modified the doctrine. There is, therefore, a presumption, not rebutted, that Congress' failure to repudiate the doctrine of equivalents is tacit recognition of its continued viability. The contention that the doctrine of equivalents conflicts with requirements of precise claiming and correction of mistakes by reissue under the patent statutes was laid to rest by *Graver Tank*. Finally, this Court's decision in *Markman* makes it clear that a patentee may invoke the doctrine of equivalents in all cases.

In its decision below, the *en banc* court seized the opportunity to "restate — not to revise — the test for infringement under the doctrine of equivalents." In doing so, the court faithfully adopted this Court's fundamental test of "insubstantial differences" viewed according to an objective standard. Thus, the doctrine of equivalents does not depend on equitable factors, including subjective bad faith of the infringer. Faithfully adhering to this Court's precedent, the court below restated the *Graver Tank* factual considerations relevant to a determination of "insubstantial differences," including consideration of substantially similar function/way/result, interchangeability of equivalent devices or process steps, copying, independent development and designing around the patent. Nor did the decision below disturb traditional limits on the doctrine of equivalents, such as prosecution history estoppel and limitations imposed by prior art.

Finally, the court below correctly held that the doctrine of equivalents is an issue of fact to be submitted to a jury in a jury trial with proper instructions. Viewed under the historical test and this Court's precedent, the issue of the doctrine of equivalents is properly submitted to a jury as a question of fact. In contrast to the issue resolved in *Markman*, no decisional precedent has designated the doctrine of equivalents an issue of law for the court alone.

Further, the inquiries underlying equivalency are intensely fact dependent and of the type regularly submitted to a jury, requiring balancing of credibility, persuasiveness and weight of evidence - traditional jury functions. Unlike claim interpretation, uniformity is not paramount since each equivalency determination presents unique factual questions. In *Winans v. Denmead*, this Court established a two-part infringement test: (1) what is the thing patented; (2) has the thing been constructed, used or sold by the defendants. The first inquiry is a question of law; the second is a question of fact to be submitted to a jury. The doctrine of equivalents is not part of the claim interpretation analysis, but is to be applied only after claim construction has been completed by the court as part of the second *Winans* infringement step. Further, the claim construction analysis under *Markman* does not require ascertainment of an absolute maximum outer boundary of equivalent structures or processes, with a subsequent determination of whether the accused device or process falls within that boundary. The inquiry is rather a purely factual comparison of "insubstantial differences" between the patented device or process and the accused device or process.

In the 1982 Federal Courts Improvement Act creating the Court of Appeals for the Federal Circuit, Congress endowed that court with exclusive jurisdiction in patent cases and the charge to unify patent law. Fulfilling its mandate, the court below has acted *en banc* to unify the law of the scope and application of the doctrine of equivalents and to affirm the right to jury trial on that issue. Since those determinations are consistent with congressional intent underlying patent law, including the 1952 Patent Act, the decision below should not be disturbed, but rather should be affirmed.

ARGUMENT

I. THE DOCTRINE OF EQUIVALENTS WAS NOT ABOLISHED BY AND IS FULLY CONSISTENT WITH THE 1952 PATENT ACT

Petitioner asserts that the 1952 Patent Act (35 U.S.C. §§ 100 *et seq.*) mutely purged American jurisprudence of any judicially created patent concepts, including the doctrine of equivalents, which were not expressly and unambiguously set forth in that Act. This Court has previously rebuffed an attempt to abolish the doctrine of equivalents as contrary to the predecessor of the 1952 Act. *See Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136 (1942). The court below correctly held that the doctrine of equivalents was neither judicially repealed nor affected by the 1952 Act. Pet. App. 26a-28a. Moreover, this Court in *Markman v. Westview Instruments, Inc.*, No. 95-26, slip op. at 2 (Apr. 23, 1996), recently reaffirmed the continued existence of the doctrine of equivalents, notwithstanding the intervention of the 1952 Act (a patent protects not only literal infringement but also "products that go to the heart of the invention but avoid the literal language of the claim by making a noncritical change").

The 1952 Act added 35 U.S.C. § 271,¹² which was the first statutory provision for patent infringement. S. REP. NO. 1979, 82d Cong., 2d Sess., *reprinted in* 1952 U.S.C.C.A.N. 2394, 2402. This provision, together with

¹² "[W]hoever without authority makes, uses or sells any patent invention . . . infringes the patent." 35 U.S.C. § 271(a).

§ 285,¹³ broadly grants the right to a civil action "for infringement." The statute does not distinguish between literal infringement or infringement under the doctrine of equivalents, nor does it proscribe the doctrine of equivalents expressly or inferentially. As defined by the Act, there is but one cause of action: for patent infringement – whether literal or by equivalents. In fact, "the literal infringement of a patent is rarely found." 6 E. LIPSCOMB, WALKER ON PATENTS § 22:23 at 512 (3d ed. 1990); *Graver Tank Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950) ("Outright and forthright duplication is a dull and very rare type of infringement.").

This Court has noted that "§ 271(a) of the new Patent Code [of 1952], which defines 'infringement,' left intact the entire body of case law on direct infringement." *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 342 (1961). Giles Rich, one of the principal drafters of the 1952 Act and now a member of the Federal Circuit, explained: "[p]aragraph [271](a) defines direct infringement and is present only for the sake of completeness. We got along without it for 162 years and we could again. Its omission would change nothing." Giles Rich, *Infringement Under Section 271 of the Patent Act of 1952*, 35 J. PAT. OFF. SOC'Y 476, 491 (1953). It is thus clear that the 1952 Act did not affect the existing "body of case law on direct infringement," which included *Graver Tank* decided two years earlier and its forerunners embodying the doctrine of

¹³ "A patentee *shall* have remedy by civil action for infringement of his patent." (emphasis added).

equivalents. Indeed, the 1952 Act tacitly adopted *Graver Tank* by not repudiating it.¹⁴

The principal purpose of the 1952 Patent Act was "the codification of title 35, United States Code, and involves simplification and clarification of language and arrangement." 1952 U.S.C.C.A.N. at 2397. Notably, the Act and its legislative history make no express change in the then-existing law of the doctrine of equivalents. In fact, the portions of the Act relating to infringement *expanded* the patent protection by overturning certain Supreme Court decisions, e.g., *Mercoide Corp. v. Mid-Continent Investment Co.*, 320 U.S. 661 (1944) (unduly restricting rights of the patent owner in areas of contributory infringement and patent misuse). 1952 U.S.C.C.A.N. at 2402; *see also*, 35 J. PAT. OFF. SOC'Y at 489-90 ("[i]ts purpose is to correct an injustice and restore the equal protection of the patent law to all the types of inventions on which the statute authorizes the grant of patents"). Accordingly, *Graver Tank* was one of the few cases of its era where this Court did *not* restrict patent rights, and should therefore be given great deference in accord with Congressional intent underlying the 1952 Act. *See* Karl B. Lutz, *The New 1952 Patent Statute*, 35 J. PAT. OFF. SOC'Y 155, 156-57 (1953) ("[C]ongress, being cognizant of this changed attitude of the courts, has inserted in the new act some provisions which codify the 'common

¹⁴ There is clear evidence that Congress was aware of the doctrine of equivalents when it enacted the 1952 Act from contemporaneous comments. *See* comments of representative of Department of Justice, H.R. REP. NO. 1923, 82 Cong., 2d Sess. 3 (1952); comments of Rep. Joseph R. Bryson speaking at the Philadelphia Patent Law Association, (8 CONG. REC. A415, A416 (Jan. 28, 1952)). These comments provide further insight that the doctrine was not abrogated by the 1952 Act.

law' of patents as it existed prior to the recent apostasy from the benevolent policy of the Constitution").

Petitioner contends that congressional silence on the doctrine of equivalents in § 271 overturns prior precedent of this Court. It is illogical and at odds with basic principles of statutory interpretation to argue that while Congress expressly broadened protection afforded to patent owners in some areas, it silently retracted others. In *Midlantic National Bank v. New Jersey Department of Environmental Protection*, this Court rejected the argument that the enactment of the bankruptcy code had silently abrogated a longstanding judicially developed bankruptcy doctrine, holding that:

The normal rule of statutory construction is that if Congress intends for legislation to change the interpretation of a judicially created concept, it makes that intent specific If Congress wishes to [change this concept], 'the intention would be clearly expressed, not left to be collected or inferred from disputable considerations of convenience'

474 U.S. 494, 501 (1986) (citations omitted).

Since there is no evidence that Congress by bill or otherwise has ever expressly considered legislation affecting the doctrine of equivalents, it must be assumed that the rule of *Graver Tank* and its predecessors is correct. See *Johnson v. Transportation Agency*, 480 U.S. 616, 629 n.7 (1986) ("Congress has not amended the statute to reject our construction, nor have any such amendments even been proposed, and we therefore may assume that our interpretation was correct."). This Court has instructed:

Congress is presumed to be aware of an administrative or judicial interpretation of a

statute and to adopt that interpretation when it re-enacts a statute without change. So too, where as here, Congress adopts a new law incorporating sections of a prior law, Congress normally can be presumed to have had knowledge of the interpretation given to the incorporated law, at least insofar as it affects the new statute.

Lorillard v. Pons, 434 U.S. 575, 580-86 (1977) (citations omitted). Here, Congress is presumed to have been aware of the doctrine of equivalents as defined by *Graver Tank* and to have incorporated that law into the 1952 Act insofar as it might affect § 271(a). That presumption has not been overcome.

Prior to the 1952 Act, Congress passed patent legislation on over sixty occasions. See 9 E. LIPSCOMB, WALKER ON PATENTS (3d ed. 1990) (compiling statutes). Since enactment of the 1952 Act, Congress has revisited portions of the patent statute on *twenty-nine* occasions.¹⁵ Not once did Congress manifest any intent to eliminate, modify or otherwise affect the doctrine of equivalents as a direct infringement tool. Notably, § 271(a) was amended in 1994 to add "offers to sell" to the list of prohibited activities. 108 Stat. 4988. Congress also made major revisions in legislation involving patents in 1980 in Pub. L. No. 96-517 (providing for administrative reexamination of patents to determine validity) and in 1982 in the Federal Courts Improvement Act (establishing the Federal Circuit to make patent law uniform). However, in spite of scholarly debate and alleged

¹⁵ *Id.*; Pub. L. No. 103-465 § 533, 108 Stat. 4988 (1994); Pub. L. No. 104-41, 109 Stat. 351 (1995).

dissension among members of the Federal Circuit about the doctrine (*see* Petitioner's Brief), Congress showed no intent to change existing decisional law dealing with equivalents, despite continual tinkering with the patent laws. Such legislative silence clearly manifests an intent, *sub silentio*, to preserve the status quo. In *Square D Co. v. Niagra Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 421 (1986), this Court rejected an attempt to overturn a 1922 decision of this Court on the basis of its alleged conflict with a 1948 overhaul of the relevant statute, stating:

Congress must be presumed to have been fully cognizant of this interpretation of the statutory scheme, which had been a significant part of our settled law for over half a century, and [yet] Congress did not see fit to change it when Congress carefully reexamined this area of the law.

In the instant case, as in *Square D*, Congress has engaged in a careful and continual reexamination of patent law where the doctrine of equivalents has been a significant part of "settled law" for over a century (and certainly since 1950) and has given no indication, by statutory wording, legislative history or otherwise, that a change to this settled doctrine was intended. This resounding silence can only be read as manifesting Congressional imprimatur on the doctrine of equivalents.

Petitioner also argues that as used in 35 U.S.C. § 112 ¶ 6¹⁶ enacted as part of the 1952 Act, the term "equivalents"

¹⁶ "An element in a claim . . . may be expressed as a means or step for performing a specified function" and "such a claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

evidences congressional intent to eliminate broad protection under the doctrine of equivalents. However, this provision was enacted not to affect the doctrine of equivalents, but to statutorily overturn *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1 (1946); *In re Donaldson Co.*, 16 F.3d 1189, 1194 (Fed. Cir. 1994) (*en banc*). Further, the "equivalent" of 35 U.S.C. § 112 ¶ 6 is not related to the doctrine of equivalents. *Pennwalt Corp. v. Durand-Wayland*, 833 F.2d 931, 934 (Fed. Cir. 1987) (*en banc*) ("[s]ection 112, paragraph 6, plays no role in determining whether an equivalent function is performed by the accused device under the doctrine of equivalents"), *cert. denied*, 485 U.S. 961 (1988), and *cert. denied*, 485 U.S. 1009 (1988). Rather, 35 U.S.C. § 112 ¶ 6 defines *literal* infringement, and requires that a court find *identity* of the claimed *function* in the accused device. *Id.* If literal infringement or identity of function is not present, infringement may nevertheless still be found under the doctrine of equivalents. *Id.* Moreover, as Petitioner acknowledges, Congress was aware of the doctrine of equivalents when it enacted § 112 ¶ 6. Pet. Br. at 25; hence, it is presumed that Congress' failure to repudiate *Graver Tank* is tacit recognition of its continued viability. *Johnson*, 480 U.S. at 629; *Lorillard*, 434 U.S. at 580-81. That presumption has not been overcome.

If, as Petitioner asserts, the doctrine of equivalents is flawed and inconsistent with the patent statutes, Congress would certainly have addressed these alleged shortcomings in the last forty-five years:

[T]he powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise, there can be no

limitation of their right to modify [the patent laws] at their pleasure, so long as they do not take away the rights of property in existing patents.

McClurg v. Kingsland, 42 U.S. (1 How.) 202, 206 (1843). Since Congress has not acted, it must be assumed that the rule of *Graver Tank* and its predecessors is consistent with the 1952 Act. *Johnson*, 480 U.S. at 629 n.7. Also, since Congress has not interfered, this Court should abstain as well and not create new law by restricting access to or application of the doctrine of equivalents.

Petitioner contends that the doctrine of equivalents is inconsistent with the requirement of precise claiming required by § 112 of the 1952 Act,¹⁷ and that this alleged imprecision promotes uncertainty.¹⁸ In its decision below, the court carefully analyzed the argument raised by Petitioner, correctly concluding "[t]he Supreme Court explained that the doctrine is not inconsistent with the requirement for explicit claims." Pet. App. at 26a-27a. As Petitioner concedes, § 112 effected no substantive change from the claiming requirement of the Patent Act of 1870, eighty years before *Graver Tank*. See Patent Act of 1870, ch. 230, § 26, 16 Stat. 198, 201

¹⁷ "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

¹⁸ Petitioner relies for support of its precise claiming arguments on the position of the United States as amicus curiae in *Standard Indus., Inc. v. Tigrett Indus., Inc.*, No. 445, October Term 1969. It is now clear, however, that the United States has abandoned its earlier position, no longer believing that the doctrine of equivalents runs counter to the statutory requirement for precise claiming. See Brief for the United States as Amicus Curiae at 14 n. 2 herein.

("requiring inventor to particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery"). This distinct claiming requirement was a restatement of the Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119 (requiring inventor to "particularly specify and point out the part . . . which he claims.") See also *Markman*, slip op. at 8. The familiarity of courts with the precise claiming principle was well known when *Graver Tank* was decided. See, e.g., *Merrill v. Yeomans*, 94 U.S. 568, 573 (1877); *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U.S. 274, 278-79 (1877); *White v. Dunbar*, 119 U.S. 47, 52 (1886); *McClain v. Ortmyer*, 141 U.S. 419, 423-24 (1891); *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 419 (1908); *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938); *Milcor Steel Co. v. George A. Fuller Co.*, 316 U.S. 143, 145-46 (1942); *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942). Thus the 1952 Act added nothing to the statutory claiming requirement for precise claiming existing when this Court decided *Graver Tank*; nor, as discussed *supra*, has Congress acted to correct any alleged inconsistency between the doctrine of equivalents and the requirement for precise claims. Therefore the presumption that there is no inconsistency has not been rebutted.

Further, this Court reached its decision in *Graver Tank* over a dissent which raised that same argument, citing 35 U.S.C. § 33.¹⁹ 339 U.S. at 613-14 (Black, J., dissenting). Clearly, this Court had in mind the possibility of tension

¹⁹ An applicant "shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery."

between the statutory requirement for precise claiming and the doctrine of equivalents, and found no legal inconsistency. More fundamentally, however, the perceived "problem" is not with "uncertainty." "[A] clear and unambiguous [patent] claim [is] a rare occurrence." *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 396 (Ct. Cl. 1978). Analytical laziness by competitors should not excuse facing realistically the determinative question "is there any real difference" and making the effort to candidly analyze the function/way/result and other objective tests of "insubstantial differences."

Petitioner contends that the doctrine of equivalents permits an "end run" around the administrative examination process of the PTO by enlarging the claims. That position is also foreclosed; this Court reached its decision in *Graver Tank* over a dissent which raised that same argument. 339 U.S. at 613-14 (Black, J., dissenting) ("the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office"). "To say that the doctrine of equivalents extends or enlarges *the claims* is a contradiction in terms. The claims - i.e., the scope of patent protection *as defined by* the claims - remain the same and application of the doctrine *expands the right to exclude* to 'equivalents' of what is claimed." Amicus Curiae Brief of United States at 15 (quoting *Wilson Sporting Goods Co. v. David Geoffrey & Associate*, 904 F.2d 677, 684 (Fed. Cir.), *cert. denied*, 498 U.S. 992 (1990)). The court below agreed. Pet. App. 30a. Further, the "scope" is not enlarged if courts do not go beyond the substitution of equivalent elements. Pet. App. 133a. (Nies, J., dissenting); *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1878) (substantial equivalent same as thing itself).

Petitioner argues that only § 251 of the 1952 Act can expand patent claims through Patent Office reissue procedures.²⁰ Unlike reissue, the purpose of the doctrine of equivalents is not to correct mistakes, but to prevent an infringer from making "unimportant and insubstantial changes and substitutions in the patent which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of law." *Graver Tank*, 339 U.S. at 607. Further, the patent reissue statutes enacted in 1832 (4 Stat. 577), 1836 (5 Stat. 117) and 1928 (45 Stat. 732) were nearly identical to the 1952 Act.²¹ Nor did the 1952 Act change the types of errors for which reissue could be sought. *In re Wadlinger*, 496 F.2d 1200, 1207 n.7 (C.C.P.A. 1974) (Rich, J.); *see also, Union Asbestos & Rubber Co. v. Paltier Corp.*, 298 F.2d 48, 50-52 (7th Cir. 1962). Moreover, this Court was well aware not only of the existence of the reissue statute, but also of the distinction between reissue and the doctrine of equivalents when it decided *Graver Tank*. *See* 339 U.S. at 614-16 (reissue adequately protects patentees without doctrine of equivalents) (Black, J., dissenting). Yet, this Court affirmed the doctrine in spite of the alleged tension with statutory reissue. No good reason has been advanced to depart from that precedent.

²⁰ Reissue is designed to correct mistakes where a "patent is . . . deemed wholly or partially inoperative or invalid . . . by reason of the patentee claiming more or less than he had a right to claim." 35 U.S.C. § 251.

²¹ The 1952 Act provided expressly for broadening reissues, which previously had been recognized judicially. *See Topliff v. Topliff*, 145 U.S. 156 (1892).

The doctrine of equivalents is not, as Petitioner suggests, a different kind of infringement. There is only one cause of action under 35 U.S.C. § 271: for infringement. There has never been a decisional or statutory distinction between the legal effect of literal infringement and infringement under the doctrine of equivalents. The doctrine of equivalents is not a separate cause of action; "[p]atentees . . . are entitled in all cases to invoke to some extent the doctrine of equivalents." *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 556 (1870). The patent grant has always been interpreted as extending to substantial equivalents *ab initio*. See, e.g., *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1878) ("Authorities concur that the substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself."). The initial patent grant includes all inventions literally defined by the patent claims, as well as those having only insubstantial differences from the literally claimed invention – in the eyes of the law, these are the same thing. See *Winans*, 56 U.S. (15 How.) at 343 ("patentee . . . deemed to claim every form in which his invention may be copied.")²²

²² Even the Patent Office has always considered patent claims to include equivalents: "[a]n inventor is always entitled to equivalents -- that is to say, to devices which operate in substantially the same way to accomplish substantially the same result in a combination. *Ex parte Cook*, Commissioner's Decisions 81, 82 (1890).

II. THE DOCTRINE OF EQUIVALENTS SHOULD BE BROADLY APPLIED AND AVAILABLE TO PATENTEEES IN EVERY PATENT INFRINGEMENT ACTION

"The United States Patent System is one of the basic supports of our American economy and it has done more toward the expansion and development of our resources and industry than any other thing." Mitman, *Economic Aspects of Inventions & Legal Monopolies*, 26 MISS. L.J. 149, 149 (1955). Because of this value, this Court has acknowledged that patents should be given a generous construction:

Patents for inventions are not to be treated as mere monopolies and, therefore, odious in the eyes of the law; but they are to receive a liberal construction, and under the fair application of the rule, *ut res magis valeat quam pereat* [that the thing may rather have effect than be destroyed], are, if practicable, to be so interpreted as to uphold and not to destroy the right of the inventor.

Turrill v. M.S. & N. I. R.R., 68 U.S. (1 Wall.) 491, 509 (1863). See also H. SCHWARTZ, *PATENT LAW AND PRACTICE* 4 (2d ed. 1995) (Congress and courts have continued to enhance the value of patents).

While Petitioner seeks complete abolition of the doctrine of equivalents,²³ this Court has confirmed its continued viability: "[the patent claim] functions to forbid not only exact copies of an invention, but products that go to

²³ Notably, none of the judges in the court below or amici herein favor totally voiding the doctrine of equivalents.

'the heart of the invention but avoid the literal language of the claim by making a noncritical change.'" *Markman*, slip op. at 2.²⁴ The doctrine as restated by the court below adheres to the fundamental purpose of its creation (fairness to the patentee), while lending itself to adaption to ever-changing future innovation. G.M. Hoffman, *With Hilton Davis The Federal Circuit Takes the Doctrine of Equivalents Back to Its Roots*, 77 J. PAT. & TRADEMARK SOC'Y 763, 770 (1995). Also notable is the change of position of the United States, from opposing the doctrine of equivalents in 1969, Brief of *Amicus Curiae* of the United States in *Standard Industries, Inc. v. Tigrett Industries, Inc.*, 397 U.S. 586 (1970), to its present position that "a clearly defined doctrine of equivalents serves the goals of the Patent Act." Brief of *Amicus Curiae* United States at 14 herein. The United States also seeks to encourage foreign countries "to afford patent protection commensurate with that provided in the United States by the doctrine of equivalents." *Id.* at 1-2.²⁵

²⁴ While this Court has not previously used the "heart of the invention" and "noncritical change" language, Respondent reads this phraseology as restating the traditional *Graver Tank* tests. Cf. *Aro Mfg. Co. v. Convertible Top Replacement Co., Inc.*, 365 U.S. 336, 345 (1961) ("there is no legally recognizable or protected . . . "heart" of the invention in a combination patent.")

²⁵ "Foreign patents are often so restricted in their protection that they are of insignificant or no commercial value." B. Pravel, *Why the United States Should Adopt the First-to-File System for Patents*, 22 ST. MARY'S L.J. 797, 807 (1991). "Japan has virtually no Doctrine of Equivalents" and is "a good example of why the Doctrine of Equivalents is so important." Sean T. Moorhead, Note, *The Doctrine of Equivalents: Rarely Actionable Non-Literal Infringement or the Second Prong of Patent Infringement Charges?*, 53 OHIO ST. L.J. 1421, 1444 n.125 (1992).

The court below emphasized that the present case presented "an opportunity to restate – not to revise – the test for infringement under the doctrine of equivalents." Pet. App. 6a. While Petitioner attributes the genesis of the doctrine to the Federal Circuit, the modern statement of the principle traces to this Court's decision in *Graver Tank*. See also Pet. App. 6a-8a. That decision did not spring forth unheralded, but is simply a well-reasoned unexceptional restatement of the doctrine of equivalents established by a long line of prior precedent.²⁶ And the doctrine also has roots

²⁶ See *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126 (1942); *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211 (1940); *Keystone Driller Co. v. Northwest Eng'g Corp.*, 294 U.S. 42 (1935); *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30 (1929); *Singer Mfg. Co. v. Cramer*, 192 U.S. 265 (1904); *Coupe v. Royer*, 155 U.S. 565 (1895); *Belding Mfg. Co. v. Challenge Corn Planter Co.*, 152 U.S. 100 (1894); *Royer v. Schultz Belting Co.*, 135 U.S. 319 (1890); *Imhaeuser v. Buerk*, 101 U.S. 647 (1879); *Water-Meter Co. v. Desper*, 101 U.S. 332, 337 (1879); *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1878); *Ives v. Hamilton*, 92 U.S. 426 (1875); *Sewell v. Jones*, 91 U.S. 171 (1885); *Duff v. Sterling Pump Co.*, 107 U.S. 636 (1883); *Roberts v. Ryer*, 91 U.S. 150 (1875); *Brown v. Guild*, 90 U.S. (23 Wall.) 181 (1874); *Gill v. Wells*, 89 U.S. (22 Wall.) 1 (1874); *Rees v. Gould*, 82 U.S. (15 Wall.) 187 (1871); *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516 (1870); *Tyler v. Boston*, 74 U.S. (7 Wall.) 327, 330-31 (1868); *Case v. Brown*, 69 U.S. (2 Wall.) 320 (1864); *Burr v. Duryee*, 68 U.S. (1 Wall.) 531 (1864); *McCormick v. Talcott*, 61 U.S. (20 How.) 402 (1858); *Winans v. Denmead*, 56 U.S. (15 How.) 330 (1853); *Sloat v. Spring*, 22 F. Cas. 330, 334 (C.C.E.D. Pa. 1850) (No. 12,948a); *Gray v. James*, 10 F. Cas. 1015 (C.C.D. Pa. 1817) (No. 5,718); *Odiorne v. Winkley*, 18 F. Cas. 581 (C.C.D. Mass. 1814) (No. 10,432); *Reutgen v. Kanowrs*, 20 F. Cas. 555 (C.C.D. Pa. 1804) (Washington, Justice).

in English common law.²⁷ An acknowledgement of equivalency can be found in a patent granted by English Parliament in 1695. CHRISTINE MACLEOD, *INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM 1660-1800* 73 (1988).

As this history demonstrates, the doctrine of equivalents as reiterated by *Graver Tank* was not revolutionary, nor is it revolutionary today as reiterated by the Federal Circuit – no principle is more ingrained in patent jurisprudence. The holding of the court below correctly restates the doctrine's basic principle: "the application of the doctrine of equivalents rests on the substantiality of the differences between the claimed and accused products or processes, assessed according to an objective standard." Pet. App. 9a. This formulation is a good one. R.A. Machonkin, Note, *Markman v. Westview Instruments, Inc. & Hilton Davis Chemical Co. v. Warner-Jenkinson Co.: The Federal Circuit Gets Its Law & Its Facts Straight*, 9 HARV. J.L. & TECH. 181, 198 (1996) [hereinafter Machonkin]. In *Graver*, this Court stated the test to be "whether under the circumstances the change was so insubstantial" as to make invocation of the doctrine justified. 339 U.S. at 610. Nor was this "substantiality of the differences" standard novel. See, e.g., *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 42 (1929) ("substantial departure"; "substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself."); *Singer Mfg. Co. v. Cramer*, 192 U.S. 265, 286 (1904) ("substantial identity"); *McCormick v. Talcott*, 61 U.S. (20 How.) 402,

²⁷ See, e.g., *Heath v. Umwin*, 2 Websters Patent Cases 296 (H.L. 1855); *Stead v. Anderson*, 1 Websters Patent Cases 151 (C.P. 1847); *Hill v. Thompson And Forman*, 1 Websters Patent Cases 239 (C.P. 1818).

405 (1858) ("substantially different"); *Duff v. Sterling Pump Co.*, 107 U.S. 636, 639 (1883) ("substantial departure"). And if the differences between two devices or processes are only insubstantial, then the devices "are the same, even though they differ in name, form, or shape." *Graver Tank*, 339 U.S. at 608 (quoting *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1877)).

The basis for the "insubstantial difference" test justifying application of the doctrine of equivalents is clearly articulated by the court below, and is soundly grounded in this Court's precedent. Pet. App. 6a-7a. The doctrine evolved as a protection for patent owners against would-be imitators who, while not misappropriating every literal detail of the patent would "make unimportant and insubstantial changes and substitutions in the patent which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of law." *Graver Tank*, 339 U.S. at 607. This Court acknowledged that to prohibit only outright duplication "would place the inventor at the mercy of verbalism, . . . would deprive him of the benefit of his invention and would foster concealment rather than disclosure of inventions, which is one of the primary purposes of the patent system." 339 U.S. at 607. It was in response to this threat that the doctrine of equivalents evolved, to prevent "a fraud on a patent" by "prevent[ing] an infringer from stealing the benefit of an invention." 339 U.S. at 608.

Hence, the "insubstantial difference" standard was developed to test whether the changes that an infringer has made are so minor as to deprive the inventor of the benefit of his invention. In the present case, as described *supra*, Petitioner made a slight change in the pH from 6 to 5, which had no substantial or critical effect on the patented process.

In fundamental and practical terms, the "insubstantial difference" test simply asks whether there is any real difference between what is patented and the accused device or process. If the differences are only insubstantial, the patented invention and the accused device or process are, "in law, the same thing, and therefore within the coverage of the patent." *Sanitary Refrigerator*, 280 U.S. at 42. If, however, the differences are more than insubstantial, the alleged infringer escapes liability. The court below faithfully followed, restated and applied this Court's *Graver Tank* "insubstantial difference" test as the touchstone under the doctrine of equivalents: "no change is appropriate in the common law of equivalency as developed by the Supreme Court." Pet. App. 33a. (Newman, J., concurring)

It has not been shown that the court below departed from this Court's established precedent by adopting and applying the "insubstantial difference" standard. Nor has there been shown sound reason to abandon the *Graver Tank* test. See *Patterson v. McLean Credit Union*, 491 U.S. 164, 173-74 (1988) (overruling precedent justified only where weakened conceptual underpinnings, irreconcilable competing legal doctrines or policies, inherent confusion created by an unworkable decision, direct obstacles to important objectives in other laws or inconsistency with sense of justice or social welfare). This Court should continue the doctrine unfettered, as suggested in *Markman*.

In following this Court's precedent, the court below also clearly articulated the standards for application of the "insubstantial difference" test. It first correctly recognized that the trier of fact may consider any relevant admissible evidence probative of infringement under the doctrine of equivalents. Pet. App. 10a, 17a ("all evidence relevant to the substantiality of the differences"). That follows from this

Court's instruction that "[a] finding of equivalence is a determination of fact. Proof may be made in any form." *Graver Tank*, 339 U.S. at 605, 609 ("Equivalence, in the patent law, is not the prisoner of a formula."); *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 406, 421 (1908) (all the circumstances to be considered in determining equivalents). Clearly, this Court broadly viewed the types of evidence that, when weighed together, may bear on whether an accused device or process is the equivalent of that patented. Pet. App. 11a.

The court below then delineated exemplary, although not exclusive, evidence appropriate to demonstrate "insubstantial differences." It noted that in some instances "it is often enough to assess whether the claimed and accused products or processes include substantially the same function, way and result." Pet. App. 9a.²⁸ This classic "function-way-result" test often suffices to assess equivalency because similarity of function, way, and result leaves little room for doubt that only insubstantial differences distinguish the accused product or process from the claims." Pet. App. 10a. The court below appropriately followed *Graver Tank*, 339 U.S. at 608, in applying this principle:

a patentee may invoke this doctrine [of equivalents] to proceed against the producer of a device "if it performs substantially the same

²⁸ In the present case, the trial court's instructions, unchallenged by Petitioner, were narrowly tailored and correctly focused the jury's attention on application of the function-way-result, which was the primary evidence of equivalence that the parties offered. Pet. App. 18a, 21a-25a, 29a, 70a n.1, 104a-106a; See *Biodex Corp. v. Loredan Biomedical Inc.*, 946 F.2d 850, 854 (Fed. Cir. 1991); H. SCHWARTZ, PATENT LAW AND PRACTICE at 143 (1995).

function in substantially the same way to obtain the same result." *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 42. The theory on which it is founded is that "if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form or shape." *Machine Co. v. Murphy*, 97 U.S. 120, 125.

The court below further noted that "evidence beyond function, way, and result is also relevant to the doctrine of equivalents," addressing factors specifically identified and relied on in *Graver Tank* which the fact finder must consider, if present. Pet. App. 10a. Thus a relevant factor is "whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was." Pet. App. 11a (quoting *Graver Tank*, 339 U.S. at 609).²⁹ Evidence of copying is relevant (but not required), because copying may raise an inference that "the copyist, presumably one of some skill in the art, has made a fair copy with only insubstantial changes." Pet. App. 11a. This derives directly from *Graver Tank*: "[w]ithout some explanation or indication that [the infringing product] was developed by independent research, the trial

²⁹ The court below correctly concluded that the range of infringing elements should not be limited solely to those substitutes known or contemplated by the inventor when the patent issued. Pet. App. 31a (citing *Sanitary Refrigerator Co.*, 280 U.S. at 40-43); See also *SRI Int'l. v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (1985) (*en banc*) (no requirement patentee specify every possible future embodiment of invention).

court could properly infer that the accused flux is the result of imitation rather than experimentation or invention." 339 U.S. at 612.³⁰

Once a "competitor becomes aware of a patent, and attempts to design around its claims, the fact finder may infer that the competitor, presumably one of ordinary skill in the art, has designed substantial changes into the new product to avoid infringement." Pet. App. 13a.³¹ This factor is consistent with and nothing more than application of the *Graver Tank* consideration of the presence or absence of "evidence of any kind to show that [the infringing product or process] was developed as the result of independent research or experiments." 339 U.S. at 611. It also fairly balances the inference that may arise from copying, and therefore favors the accused infringer. The court below noted that independent development, as addressed in *Graver Tank*, is also relevant to refute a charge of copying. Pet. App. 14a. Consequently, all of the factors which the court below identified as relevant to proof of "insubstantial differences" find their source in *Graver Tank* and its predecessors.

The court below also emphasized that the test of "insubstantial differences" is objective as viewed from the

³⁰ As described *supra*, it was only through the unauthorized use of Respondent's confidential information that Petitioner was able to finally obtain, after initial failure, a viable and infringing process. Thus, there was evidence from which the trier of fact could infer that Petitioner copied Respondent's process, resulting in only insubstantial differences from the patented process. Petitioner proffered evidence that its process was independently developed. J.A. 125, 129.

³¹ Petitioner claimed it was not aware of Respondent's patent until after it had developed its infringing process. J.A. 125. Hence, this factor is not applicable in the instant case.

vantage point of one of ordinary skill in the relevant art. Pet. App. 10a. This objective standard follows from the *Graver Tank* test of "insubstantial differences." 339 U.S. at 609 ("whether persons reasonably skilled in the art would have known").³² This approach is also consistent with and follows other areas of patent law where the courts apply an objective "person of ordinary skill in the art" standard. See, e.g., 35 U.S.C. § 103 (obviousness); 35 U.S.C. § 112 (enablement).

The court below also held that "[t]he trial judge does not have discretion to choose whether to apply the doctrine of equivalents when the record shows no literal infringement." Pet. App. 17a-18a. As demonstrated *infra*, the court in a jury trial may not decide the issue where the matter is not ripe for judgment as a matter of law.

Also, as the court below recognized, "every patent owner is entitled to invoke the doctrine of equivalents." Pet. App. 16a. This proposition is well supported by this Court's precedent. See *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 556 (1870) ("Patentees . . . are entitled in all cases to invoke to some extent the doctrine of equivalents."). In *Graver Tank*, this Court noted that the doctrine of equivalents "continues today ready and available for utilization when the proper circumstances for its application arise." 339 U.S. at 608.³³ This Court's most recent

³² In *Graver Tank*, the court relied upon testimony of specialists familiar with the problems involved, technical literature, and disclosures of prior art. 339 U.S. at 611-12.

³³ The "proper circumstances" arise when "insubstantial differences" are involved. *Graver Tank*, 339 U.S. at 607 ("[A] patentee may invoke this doctrine to proceed against the producer of a device if (continued...)")

acknowledgment of the doctrine in *Markman* likewise placed no restrictions on its potential availability to a patent owner.

While the doctrine of equivalents should be broadly applied to insure that the protection of the patent grant is not converted "into a hollow and useless thing," the court below has not disturbed or narrowed the traditional limits imposed on the doctrine. As the court below correctly recognized, the doctrine of "prosecution history estoppel" may be "invoked as a limitation to infringement under the doctrine of equivalents." Pet. App. 24a; See *Keystone Driller Co. v. Northwest Eng'g. Corp.*, 294 U.S. 42, 48 (1935); *Smith v. Magic City Kennel Club*, 282 U.S. 784, 790 (1931). This doctrine precludes a patentee from recapturing, through the doctrine of equivalents, matter which was intentionally surrendered during prosecution. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 824 (Fed. Cir. 1992). To determine whether an estoppel exists limiting application of the doctrine of equivalents, "a close examination must be made as to, not only what was surrendered, but also the reason for such a surrender." Pet. App. 24a. Thus, an amendment to a claim, to limit potential equivalents, must demonstrate a disclaimer of subject matter required by the Patent Office to be disavowed as condition of the grant. *Sutter v. Robinson*, 119 U.S. 530, 541 (1886); See also *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136-37 (1942); *Garrett Corp. v. United States*, 422 F.2d 874, 882 (Ct. Cl. 1970) ("assumed plaintiff did not intend to narrow its scope [of claim] any more than necessary to distinguish over the art").

³⁴(...continued)

it performs substantially the same function in substantially the same way to obtain the same result.").

Here there was no such intentional surrender or disclaimer for pHs less than 6.³⁴

The decision below is also consistent and does not alter the general rule that the doctrine of equivalents may be limited by the prior art. See *Computing Scale Co. of Am. v. Automatic Scale Co.*, 204 U.S. 609, 617 (1907); *Wilson Sporting Goods v. David Geoffrey & Assocs.*, 904 F.2d 677, 684 (Fed. Cir.), cert. denied, 498 U.S. 992 (1990) (analyzing hypothetical claim to test validity under doctrine of equivalents).

Petitioner argues that the doctrine should be applied only in cases where the infringer acts in subjective bad faith. The court below emphasized that invocation of the doctrine of equivalents does not depend on a threshold showing of bad faith, evil intent or other subjective factors. Pet. App. 12a. This Court in *Graver Tank* also reached its decision over a dissent which raised this same argument. See *Graver Tank*,

³⁴ In the present case, the inventors amended the claims to recite "a pH from approximately 6.0 to 9.0" to avoid the prior art Booth patent which taught a process operating at a pH higher than 9.0. "This amendment surrendered pHs above 9.0, but did not bar [Respondent] from asserting equivalency to processes such as [Petitioner's] operating sometimes at a pH below 6." Pet. App. 24a. Thus, Respondent was not recapturing subject matter surrendered during patent prosecution. Rather, Petitioner's pH found to be equivalent was on the opposite end of the range from the prior art. See C.A. Jt. App. 2892. Nor was the lower limit added to prevent "foaming." As described *supra*, the patented process was successfully tested to pH values as low as 2.2 [six thousand times more acidic than pH 6] with no effect on the process because of "foaming." These findings should not be disturbed. See *Graver Tank I*, 336 U.S. at 275.

339 U.S. at 612-13 (Black, J., dissenting).³⁵ Infringement, whether literal or under the doctrine of equivalents, has never depended upon the subjective intent of the infringer nor any other "equitable" factors. See, e.g., *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 478 (1974) ("This protection goes not only to copying the subject matter, . . . but also forbids independent creation."). There is a constitutional patent right; there is no such right to infringe a patent, knowingly or otherwise.

While Petitioner and its supporting amici argue strenuously that the doctrine of equivalents harms industry and innovation, they offer no specific evidence that the doctrine negatively impacts any specific industry. See Pet. App. 33a. (Newman, J., concurring) ("The doctrine of equivalents has neither greatly excited the centers of legal scholarship, nor seriously stirred action-oriented industry."). "[T]he doctrine of equivalents, on balance, serves the interest of justice and the public interest in the advancement of technology, by supporting the creativity of originators while requiring appropriators to adopt more than insubstantial technologic change." Pet. App. 43a. (Newman, J., concurring).

In any event, these policy considerations are moot — both Congress and this Court have endorsed the continued existence of the doctrine of equivalents. If the question at issue turns on the balancing of competing public policies, any change in the law is best left to Congress:

The choice we are urged to make is a matter of high policy for resolution within the

³⁵ The essence of the doctrine of equivalents is "fraud on a patent," *Graver Tank*, 339 U.S. at 608, not fraud by the accused infringer. See Pet. App. 12a.

legislative process after the kind of investigation, examination, and study that legislative bodies can provide and courts cannot. That process involves the balancing of competing values and interests, which in our democratic system is the business of elected representatives. Whatever their validity, the contentions now pressed on us should be to the political branches of the Government, the Congress and the Executive, and not to the Courts.

Diamond v. Chakrabarty, 447 U.S. 303, 317 (1980).

III. THE ISSUE OF INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS IS AN ISSUE OF FACT TO BE SUBMITTED TO THE JURY IN A JURY CASE

The court below correctly held that "infringement under the doctrine of equivalents is an issue of fact to be submitted to the jury in a jury trial with proper instructions, and to be decided by the judge in a bench trial." Pet. App. 17a, 25a. This Court has made clear in its Seventh Amendment jurisprudence that the right to trial by jury is sacred and should be jealously protected: "[m]aintenance of the jury as a fact-finding body is of such importance and occupies so firm a place in our history and jurisprudence that any seeming curtailment of the right to a jury trial should be scrutinized with the utmost care." *Dimick v. Schiedt*, 293 U.S. 474, 486 (1935); *Jacob v. City of New York*, 315 U.S. 752, 752-53 (1942) ("The right of jury trial in civil cases at common law is a basic and fundamental feature of our system of federal jurisprudence which is protected by the

Seventh Amendment. A right so fundamental and sacred to the citizen, whether guaranteed by the Constitution or provided by statute, should be jealously guarded by the courts.").

The right of jury trial preserved under the Seventh Amendment "is the right which existed under the English common law when the Amendment was adopted." *Baltimore & Carolina Line, Inc. v. Redman*, 295 U.S. 654, 657 (1935). The existence of the right is determined by the two part "historical test": (1) "whether we are dealing with a cause of action that either was tried at law at the time of the Founding or is at least analogous to one that was"; and (2) "whether the particular trial decision must fall to the jury in order to preserve the substance of the common-law right as it existed in 1791." *Markman*, slip op. at 5.

As to the first inquiry, "there is no dispute that infringement cases today must be tried to a jury." *Markman*, slip op. at 6. The second inquiry involves whether a particular issue within a jury trial, here the doctrine of equivalents, is itself a jury issue. *Id.* This inquiry is resolved by reference to historical evidence that the issue was regarded as a jury question under English practice. *Id.* There is evidence that early English patent cases discussed the principle of equivalents in the context of jury trials. See *Arkwright v. Nightingale*, 1 Websters Patent Cases 60, 64 (C.P. 1785); *Bramah v. Hardcastle*, 1 Carpmael 168, 171 (K.B. 1789). Hence, there existed the direct antecedent of the modern doctrine of equivalents in English law prior to 1791.

This historical evidence is buttressed by early cases from this Court. In *Tucker v. Spalding*, 80 U.S. (13 Wall.) 453, 455 (1871), this Court acknowledged:

Whatever may be our personal opinions of the fitness of the jury as a tribunal to determine the diversity or identity in principle of two mechanical instruments, it cannot be questioned that when the plaintiff, in the exercise of the option which the law gives him, brings his suit in the law in preference to the equity side of the court, that question must be submitted to the jury, if there is so much resemblance as raises the question at all.

In *Winans*, 56 U.S. (15 How.) at 344, the jury was assigned the task of deciding whether the defendant's product was so close to the patentee's "as substantially to embody the patentee's mode of operation, and thereby attain the same kind of result as was reached by his invention." The allusion to "mode" and "result" clearly point to application of the doctrine of equivalents. The Court then held: "[w]hether, in point of fact, the defendant's cars did copy the plaintiff's invention, in the sense above explained [i.e., equivalents], is a question for the jury, and the court erred in not leaving that question to them upon the evidence in the case, which tended to prove the affirmative." 56 U.S. (15 How.) at 544. See also *Battin v. Taggart*, 58 U.S. (17 How.) 74, 85 (1854) ("questions of fact . . . such as the identity of the machine used by the defendant with that of the plaintiff's, or whether they have been constructed and act on the same principle," are questions "which come within the province of a jury"); *Tyler v. Boston*, 74 U.S. (7 Wall.) 327, 330-31 (1868) (whether one compound of given proportions is substantially the same as another compound varying in the proportions - whether they are substantially the same or substantially different - is a question of fact and for the jury); *Turrill v. M.S. & N.I.R.R. Co.*, 68 U.S. (1 Wall.) 491 (1863)

("[T]here was an important question of fact which should have been left to the jury, whether the machines introduced by the defendants . . . were substantially the same as the machine of the patentee."); *Rees v. Gould*, 82 U.S. (15 Wall.) 187, 192 (1871) (discussing proper jury instructions on equivalency). See also *Royer v. Schultz Belting Co.*, 135 U.S. 319 (error not to submit question of equivalence of two machines to jury upon proper instructions); cf. *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 35 (1929) (equivalency question of law where facts undisputed).

In *Winans*, this Court also instructed "it is the duty of courts and juries to look through the form for the substance of the invention." 56 U.S. (15 How.) at 343 (emphasis added). The acknowledgment that juries have a *duty* to look for the "substance of the invention", i.e. the "heart of the invention" (see *Markman*, slip op. at 2) clearly designates the doctrine of equivalents as a jury question.

Notably, there is a complete absence of historical evidence suggesting that the issue of the doctrine of equivalents is for the court alone. No prior decision of this Court has suggested that the equivalence issue is one of law. Cf. *Markman* (clear historical precedent claim construction for court, not jury). To the contrary, in *Graver Tank*, 339 U.S. at 609-10, this Court noted that "[a] finding of equivalence is one of fact." Cf. *United States v. Francesco*, 725 F.2d 817, 821 (1st Cir. 1984) (question whether cocaine compound "equivalent" under Drug Control Act "issue of fact to be determined by the jury."). The unambiguous designation of the equivalency issue as a question of fact clearly shows that this Court has not considered it as one of law or as mixed fact and law.

In addition to historical evidence, functional considerations support juries as the arbiter of equivalents in patent infringement actions. See *Markman*, slip op. at 18. The inquiries underlying equivalency: function/way/result, interchangeability, designing around, and copying, are intensely fact-dependent, reflecting scientific facts that exist in the real world. Machonkin at 199. There is no evidence that judges, to the exclusion of juries, regularly resolve issues analogous to the doctrine of equivalents, or have any special expertise to do so. See *Slocum v. New York Life Ins. Co.*, 228 U.S. 364, 388 (1913) (applicability of the Seventh Amendment "not a question of whether the facts are difficult or easy of ascertainment."). Further, credibility is often at issue in the resolution of equivalents. In *Graver Tank*, this Court noted "[l]ike any other issue of fact, final determination [of equivalency] requires a balancing of credibility, persuasiveness and weight of evidence." 339 U.S. at 609-10. "Credibility determinations, the weighing of evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge" *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). In practice, if the question of equivalents were entirely removed from the jury, there would be nothing for it to decide on the issue of infringement – a result contrary to the rule that the jury decides infringement. *Winans*, 56 U.S. (15 How.) at 337.

Finally, in contrast to claim interpretation, uniformity in the treatment of a given patent is of no moment where the doctrine of equivalents is concerned, since no conceivable substantiality of difference determination could achieve uniformity. Machonkin at 199. For example, in one hypothetical case, the issue may be whether a patented three-bladed ceiling fan having a solid support rod is the equivalent

of one having a hollow rod. See *Markman*, slip op. at 2 n.1 (citing H. SCHWARTZ, PATENT LAW AND PRACTICE at 81-82 (2d ed. 1995)). In another case involving the same hypothetical patent, the issue may be whether a four-bladed fan is the equivalent of a three-bladed fan. Clearly, the prior equivalency determination provides no guidance for uniform treatment of the patent in the latter case, although ordinary principles of res judicata and collateral estoppel may govern equivalency questions in future litigation. See, e.g., *Blonder-Tongue Lab., Inc. v. University of Ill. Found.*, 402 U.S. 313 (1971).

Nor does the court abandon its gatekeeper role where the jury determines equivalency. Cf. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, – U.S. –, 113 S. Ct. 2786 (1993). Legal questions of sufficient and admissible evidence must still be decided. Pet. App. 17a. Also, the trial court may dispose of evidentially unsupported charges of equivalence through judgments as a matter of law.

Where equivalency is at issue, this Court has drawn no distinction between its submission to judge or jury. In *Machine Co. v. Murphy*, this Court stated:

the correct rule being that, in determining the question of infringement, the court or jury, as the case may be, are not to judge about similarities or differences by the names of things, but are to look at the machines or their several devices or elements in the light of what they do, or what office or function they perform, and how they perform it, and to find that one thing is substantially the same as another, if it performs substantially the same

function in substantially the same way to obtain the same result

97 U.S. 120 (1878) (relied upon in *Graver Tank*, 339 U.S. at 608) [emphasis added]. It is thus clear that the resolution of equivalency, and in particular resolution of function/way/result, is not restricted to the court, but may be determined by the jury.

Some amici argue that equivalency should be taken from the jury and decided by the court as a matter of law as part of the *Markman* patent claim construction process, arguing this will improve claim interpretation certainty. It is difficult to see, however, how pre-litigation certainty of claim boundaries will be promoted by determination of equivalents by the court, rather than the jury. Assuredly, Petitioner cites no precedent in support of its assertion. Moreover, as shown *supra*, where a material issue of equivalency exists, the court may not summarily define the *scope* of possible equivalent devices or processes.³⁶ See also G. CURTIS, A TREATISE ON THE LAW OF PATENTS § 310 at 405 (4th ed. 1873) ("whether one thing is a mechanical equivalent for another is a question for the jury [to be determined by] whether the contrivance used by the defendant is used for the same purpose, performs the same duties, or is applicable to the same object, as the contrivance used by the patentee"). This Court in *Winans v. Denmead*, 56 U.S. (15 How.) 330, 337 (1853), allocated the fundamental responsibilities of judge and jury in assessing the issue of patent infringement:

³⁶ In the present case, there were no contested issues of meaning of claim terms requiring a *Markman*-type legal claim term construction by the trial court.

On such a trial [for infringement], two questions arise. The first is, what is the thing patented; the second, has the thing been constructed, used or sold by the defendants. The first is a question of law, to be determined by the court, construing the letters patent, and the description of the invention and specification of claim annexed to them. The second is a question of fact, to be submitted to a jury.

The determinative question then becomes, within which of these two inquiries does resolution of the doctrine of equivalents lie? The answer is the second, and Petitioner concurs. Pet. Rep. Br. at 2 n.1.

In *Royal Typewriter Co. v. Remington Rand, Inc.*, 168 F.2d 691, 692 (2d Cir. 1948) (cited in *Graver Tank* and relying on *Winans*), Judge Learned Hand noted that the doctrine of equivalents is applied "after all aids to interpretation have been exhausted, and the scope of the claims has been enlarged as far as the words can be stretched" Thus equivalents are considered as a separate inquiry *only after* the claim construction step is completed, and not as part of it.

In the context of a patent, the "construction" of a claim is directed to ascertaining the meaning of claim terms (see *Markman*), not to defining whether an accused device or process is the equivalent of that claimed. In *Silsby v. Foote*, 55 U.S. (14 How.) 218, 225 (1852), this Court noted "not the construction of the claim, strictly speaking, but the application of the claim, should be left to the jury." Thus the Court carefully distinguished the question of the meaning of the words of the patent – a legal issue – from the factual question of how the particular machines would work,

i.e. what particular parts produce the claimed result, a jury issue.

Likewise, in *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 815 (1870), this Court also distinguished between claim construction and claim comparison to determine infringement:

"[t]his view of the case is not intended to, and does not, trench upon the doctrine that the construction of written instruments is the province of the court alone. It is not the construction of the instrument but the character of the thing invented which is sought in questions of identity and diversity of inventions."

Thus the Court explicitly differentiated the job of interpreting the patent language ("construction of the instrument") from the separate job of the jury of deciding, as a factual matter, whether the infringer's product met the description of the patent thus interpreted ("character of the thing invented"). The reference to "identity" and "diversity" also shows that the Court was focusing on issues of similarity or difference as outside the patent construction process, thus leaving the task of comparing to determine whether insubstantial differences exist, which is the essence of the doctrine of equivalents, to the jury.

In *Coupe v. Royer*, 155 U.S. 565, 579 (1895), this Court stated "the court defines the patented invention as indicated by the language of the claims; the jury judge whether the invention so defined covers the art or article employed by the defendant." Again the Court clearly separated the judge's role of patent construction ("defines") from the jury's role to determine whether the patent "covers" the accused process or device.

There is another important difference which distinguishes the claim construction inquiry from the claim application inquiry. In the first instance, the meaning of claim terms is construed by reference to the claims, the specification, the prosecution history, and expert testimony. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (1995), *aff'd*, - U.S. - (1996) (citing, *inter alia*, *Winans*, 56 U.S. (15 How.) at 338; *Graham*, 383 U.S. at 33; *U.S. Indus. Chems., Inc. v. Carbide & Carbon Corp.*, 315 U.S. 668, 678 (1942)). However, the claim may not be interpreted in light of the accused device. *SRI Int'l. v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (*en banc*). In contrast, "what constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case." *Graver Tank*, 339 U.S. at 608. This is determined by assessing whether there are insubstantial differences between the claim and the accused device or process. *Id.* Thus, the first step of the *Winans* inquiry of claim construction *excludes* consideration of the accused device or process, while the second *Winans* step *requires* consideration of the accused device or process. Further, since "[a] finding of equivalence is a determination of fact," *Graver Tank*, 339 U.S. at 609, it cannot be part of the first *Winans* inquiry, since that inquiry is a question of law under *Markman*, and therefore it must form part of the second inquiry. Finally, since equivalence "requires a balancing of credibility, persuasiveness and weight of evidence," the issue cannot be one of law because determinations of credibility and evidence weighing are for the jury in a jury case. *Pet. App. 17a; Tennant v. Peoria Pekin Ry.*, 321 U.S. 29, 35 (1944).

The proper analysis does not, as some argue, require exact ascertainment of the absolute hypothetical outer boundary of claim equivalents as part of the legal claim term construction inquiry, followed by testing whether the accused product or process lies within or without that hypothetical boundary. Rather, the proper *factual* inquiry is whether the real world differences between the claim (after claim term definition by the court) and the accused product or process are "insubstantial." That inquiry is for the jury as shown *supra*.

That the doctrine of equivalents should be decided as a matter of law where disputed factual issues exist is also expressly foreclosed by *Graver Tank*, where this Court found that the decision below "should not be disturbed unless clearly erroneous." 339 U.S. at 604. The reference to the "clearly erroneous" standard of review indicates that the court considered the equivalency issue to be purely factual. See *Insta-Foam Prods., Inc. v. Universal Foam Sys., Inc.*, 906 F.2d 698, 702 (Fed. Cir. 1990). If the Court had considered the issue one of law, it would have invoked *de novo* review, which it did not. Cf. *Markman*.

Nor is the doctrine of equivalents "equitable" as opposed to "legal", requiring its determination by the court alone. Pet. App. 19a-20a. "Equity" applied to the doctrine of equivalents means only "general fairness." *Things Remembered, Inc. v. Petrarca*, — U.S. —, 116 S. Ct. 494, 499 (1995) (Ginsberg J., concurring). Nowhere in *Graver Tank* (or its predecessors) is there any suggestion that the doctrine of equivalents sounds in equity, and the traditional trappings of an equitable cause, such as the subjective intent of the infringer, are notably lacking. Pet. App. 16a. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 478

(1974). Rather, this Court "credited the origin of the doctrine of equivalents to its own decision in *Winans v. Denmead* — a case at law, not equity. See *Graver Tank*, 339 U.S. at 608; *Winans v. Denmead*, 56 U.S. (15 How.) at 338." Pet. App. 16a. Also, the fact that courts prior to *Graver Tank* charged juries on the issue of equivalents answers any supposition that the doctrine is only available in equity. See, e.g., *Winans v. Denmead*, 56 U.S. (15 How.) 330, 344 (1853); *Battin v. Taggart*, 58 U.S. (17 How.) 74, 85 (1854); *Tyler v. Boston*, 74 U.S. (7 Wall.) 327, 330-31 (1868); *Turrill v. M.S. & N.I.R.R. Co.*, 68 U.S. (1 Wall.) 491 (1863); *Rees v. Gould*, 82 U.S. (15 Wall.) 187, 192 (1871); *Silsby v. Foote*, 55 U.S. (14 How.) 218, 225 (1852); *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 815 (1870); *Coupe v. Royer*, 155 U.S. 565, 579 (1895); *Royer v. Schultz Belting Co.*, 135 U.S. 319 (1890).³⁷

The Constitution, Article I, § 8, cl. 8 authorizes Congress "[t]o promote the progress of Science and useful Arts" Indeed, "[t]he powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise" *McClurg v. Kingsland*, 42 U.S. (1 How.) 202, 206 (1843). Thus Congress may, if it chooses, maintain, modify or expand the doctrine of equivalents. It may also expand the right to jury trial to particular issues. See 9 C. WRIGHT & A.

³⁷ Even if this Court were to deem the application of the doctrine to be in law or equity, the trial court *independently* found infringement as a matter of law and construed the scope of equivalents in fashioning equitable relief. Pet. App. 165a-166a (ruling on JMOL renewal that there was infringement under doctrine of equivalents); *Id.* at 177a (construing scope of claim in fashioning permanent injunction). Therefore, the judgment below would still be affirmed.

MILLER, FEDERAL PRACTICE & PROCEDURE § 2302.2 at 44-45 (1995).

In 1982, Congress acted to create the Court of Appeals for the Federal Circuit as a constitutional Article III court. Pub. L. No. 97-164, 96 Stat. 48. The Federal Circuit is unique among appellate courts in its nationwide and specialized limited jurisdiction, particularly with respect to patent issues. 28 U.S.C. § 1295(a)(1). In creating the Federal Circuit, Congress specifically endowed it with the power to make patent law uniform. "[T]he uniformity in the law that will result from the centralization of patent appeals in a single court will be a significant improvement from the standpoint of the industries and businesses that rely on the patent system." H.R. REP. NO. 312, 97th Cong., 1st Sess. 11 (1981); *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 813 (1988) (Federal Circuit created "to reduce the widespread lack of uniformity and uncertainty of legal doctrine that exist[ed] in the administration of patent law."). Congress thus gave the Federal Circuit through the above-described legislation the power to affirm or create rights for particular patent issues, consistent with overall congressional intent in the patent arena and the powers entrusted to Congress under Article I, § 8, cl. 8. Cf. *Graham v. John Deere*, 383 U.S. 1, 5-6 (1965).

As reflected in the record of this case, there has been a dispute among members of the Federal Circuit and the patent bar whether application of the doctrine of equivalents should be revised. Insofar as that dispute reflected a lack of uniformity in the patent law (which Respondent does not concede), there existed a need for the Federal Circuit to speak as one voice to fulfill its congressional charge to make the patent law uniform as it involved the doctrine of equivalents.

Fulfilling its mandate, the Federal Circuit has now acted *en banc*, unifying the law as to the scope and application of the doctrine of equivalents and affirming the right to jury trial on that issue. Because of the congressional mandate and its special expertise in patents, Federal Circuit decisions are entitled to special deference. *United States v. Fausto*, 484 U.S. 439, 464 (1988) ("Because of the unique character of the Federal Circuit, its conclusions are entitled to special deference by this Court Because its jurisdiction is confined to a defined range of subjects, the Federal Circuit brings to the cases before it an unusual expertise that should not lightly be disregarded.") (Stevens, J., dissenting).³⁸ Moreover, the holdings of the Federal Circuit should be set aside *only* if they are contrary to the authority entrusted to that court by Congress or are inconsistent with the Constitutional patent grant itself. As demonstrated above, the judgment of the court below is consistent with the 1952 Patent Act and subsequent legislation. Further, continuation of the right to jury trial in cases where the doctrine of equivalents is at issue does not exceed the authority granted the Federal Circuit. "Within the limits of the constitutional grant, the Congress may, of course, implement the stated purpose of the Framers by selecting the policy which in its judgment best effectuates the constitutional aim." *Graham*, 383 U.S. at 6. Moreover, "[i]t is the duty of . . . the courts in the administration of the patent system to give effect to the constitutional standard by appropriate application, in each case, of the statutory scheme

³⁸ The special patent expertise of the Federal Circuit incorporates that of its predecessors, the Court of Customs and Patent Appeals and the Court of Claims. *South Corp. v. United States*, 690 F.2d 1368, 1370 (Fed. Cir. 1982) (*en banc*).

of the Congress." *Id.* Here, Congress has empowered the Federal Circuit to implement the statutory scheme of uniform patent law, and that court has faithfully followed that charge in addressing the doctrine of equivalents in the decision at issue. The court below has broadened no rights, but has simply restated settled law. That decision should not be disturbed.

CONCLUSION

For the foregoing reasons, the *en banc* judgment of the Court of Appeals for the Federal Circuit should be affirmed.

Respectfully Submitted,

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May 13, 1996

APPENDIX

The U.S. Constitution, article I, § 8, cl. 8 provides:

The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . .

The Patent Act of July 13, 1832, 4 Stat. 577, provides in pertinent part:

[§ 3] *And be it further enacted*, That wherever any patent which as been heretofore, or shall be hereafter, granted to any inventor in pursuance of the act of Congress entitled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," passed on the twenty-first day of February, in the year of our Lord, one thousand seven hundred and ninety-three, or of any of the acts supplementary thereto, shall be invalid or inoperative, by reason that any of the terms or conditions prescribed in the third section of the said first-mentioned act, have not, by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, been complied with on the part of the said inventor, it shall be lawful for the Secretary of State, upon the surrender to him of such patent, to cause a new patent to be granted to the said inventor for the same invention of the residue of the period then unexpired, for which the original patent was granted, upon his compliance with the terms and conditions prescribed

in the said third section of the said act. And, in case of his death, or any assignment by him made of the same patent, the like right shall vest in his executors and administrators, assignee, or assignees: *Provided however*, That such new patent so granted shall, in all respects, be liable to the same matters of objection and defence as any original patent granted under the said first-mentioned act. But no public use or privilege of the invention so patented, derived from or after the grant of the original patent, either under any special license of the inventor, or without the consent of the patentee that there shall be a free public use thereof, shall, in any manner, prejudice his right of recovery for any use or violation of his invention after the grant of such new patent as aforesaid.

The Patent Act of 1836, 5 Stat. 117, provides in pertinent part:

[§ 6] *And be it further enacted*, That any person or persons, having discovered or invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement of any art, machine, manufacture, or composition of matter, not known or used by others before his or their discovery or invention thereof, and not, at the time of his application for a patent, in public use or on sale, with his consent or allowance, as the inventor or discoverer; and shall desire to obtain an exclusive property therein, may make application, in writing, to the Commissioner

of Patents, expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor. But before any inventor shall receive a patent for any such new invention or discovery, he shall deliver a written description of his invention or discovery, and the manner and process of making, constructing, using, and compounding the same in such full, clear, and exact terms, avoiding unnecessary prolixity, as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of any machine, he shall fully explain the principle, and the several modes in which he has contemplated the application of that principle or character by which it may be distinguished from other inventions; and shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery. He shall, furthermore, accompany the whole with a drawing or drawings, and written references, where the nature of the case admits of drawings, or with specimens of ingredients, and of composition of matter, sufficient in quantity for the purpose of experiment, where the invention or discovery is of a composition of matter; which descriptions and drawings, signed by the inventor and attested by two witnesses, shall be filed in the Patent Office; and he shall moreover furnish a model of his invention, in all cases which admit of a representation by a model, of a convenient size to exhibit advantageously its several parts. The

applicant shall also make oath or affirmation that he does verily believe that he is the original and first inventor or discoverer of the art, machine, composition, or improvement, for which he solicits a patent, and that he does not know or believe that the same was ever before known or used; and also of what country he is a citizen; which oath or affirmation may be made before any person authorized by law to administer oaths.

* * * *

[§ 13] *And be it further enacted*, that whenever any patent which has heretofore been granted, or which shall hereafter be granted, shall be inoperative, or invalid, by reason of a defective or insufficient description or specification or by reason of the patentee claiming in his specification as his own invention more than he had or shall have a right to claim as new; if the error has or shall have arisen by inadvertency, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the Commissioner, upon the surrender to him of such patent, and the payment of the further duty of fifteen dollars, to cause a new patent to be issued to the said inventor, for the same invention, for the residue of the period then unexpired for which the original patent was granted, in accordance with the patentee's corrected description and specification. And in case of his death, or any assignment by him made of the original patent, a similar right shall vest in his

executors, administrators, or assignees. And the patent, so re-issued, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing as though the same had been originally filed in such corrected form before the issuing out of the original patent. And whenever the original patentee shall be desirous of adding the description and specification of any new improvement of the original invention or discovery which shall have been invented or discovered by him subsequent to the date of his patent, he may, like proceeding being had in all respects as in the case of original applications, and on the payment of fifteen dollars as hereinbefore provided, have the same annexed to the original description and specification; and the Commissioner shall certify, on the margin of such annexed description and specification, the time of its being annexed and recorded; and the same shall thereafter have the same effect in law, to all intents and purposes, as through it had been embraced in the original description and specification.

The Consolidated Patent Act of 1870, 16 Stat. 198, provides in pertinent part:

[§ 26] *And be it further enacted*, That before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the commissioner, and shall

file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery; and said specification and claim shall be signed by the inventor and attested by two witnesses.

The Patent Act of May 24, 1928, 45 Stat. 732 provides in pertinent part:

[§ 64] Reissue of defective patents

Whenever any patent is wholly or partly inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the commissioner shall, on the surrender of such patent and the payment of the duty required by law, cause a patent for the same invention, and

in accordance with the corrected specification, to be reissued to the patentee or to his assigns or legal representatives, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the reissued patent, but in so far as the claims of the original and reissued patents are identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the reissued patent to the extent that its claims are identical with the original patent shall constitute a continuation thereof and have effect continuously from the date of the original patent. The commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claims in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued together with the corrected specifications, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the commissioner that such new matter or amendment was a part of the original

invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid.

The Patent Act of December 12, 1980, 94 Stat. 3015, provides in pertinent part:

[§ 302] Request for Reexamination

Any person at any time may file a request for reexamination by the Office of any claim of a patent on the basis of any prior art cited under the provisions of section 301 of this title. The request must be in writing and must be accompanied by payment of a reexamination fee established by the Commissioner of Patents pursuant to the provisions of section 41 of this title. The request must set forth the pertinency and manner of applying cited prior art to every claim for which reexamination is requested. Unless the requesting person is the owner of the patent, the Commissioner promptly will send a copy of the request to the owner of record of the patent.

**[§ 303] Determination of Issue by
Commissioner**

"(a) Within three months following the filing of a request for reexamination under the provisions of section 302 of this title, the Commissioner will determine whether a substantial new question of patentability affecting any claim of the patent

concerned is raised by the request, with or without consideration of other patents or printed publications. On his own initiative, and any time, the Commissioner may determine whether a substantial new question of patentability is raised by patents and publications discovered by him or cited under the provisions of section 301 of this title.

"(b) A record of the Commissioner's determination under subsection (a) of this section will be placed in the official file of the patent, and a copy promptly will be given or mailed to the owner of record of the patent and to the person requesting reexamination, if any.

"(c) A determination by the Commissioner pursuant to subsection (a) of this section that no substantial new question of patentability has been raised will be final and nonappealable. Upon such a determination, the Commissioner may refund a portion of the reexamination fee requested under section 302 of this title.

**[§ 304] Reexamination order by
Commissioner**

If, in a determination made under the provisions of subsection 303(a) of this title, the Commissioner finds that a substantial new question of patentability affecting any claim of a patent is raised, the determination will include an order for reexamination of the patent for resolution of the question. The patent owner will be given a reasonable period, not less than two months from

the date a copy of the determination is given or mailed to him, within which he may file a statement on such question, including any amendment to his patent and new claim or claims he may wish to propose, for reconsideration in the reexamination. If the patent owner files such a statement, he promptly will serve a copy of it on the person who has requested reexamination under the provision of section 302 of this title. Within a period of two months from the date of service, that person may file and have considered in the reexamination a reply to any statement filed by the patent owner. That person promptly will serve on the patent owner a copy of any reply filed.

[§ 305] Conduct of reexamination proceedings

After the times for filing the statement and reply provided for by section 304 of this title have expired, reexamination will be conducted according to the procedures established for initial examination under the provision of sections 132 and 133 of this title. In any reexamination proceeding under this chapter, the patent owner will be permitted to propose any amendment to this patent and a new claim or claims thereto, in order to distinguish the invention as claimed from the prior art cited under the provisions of section 301 of this title, or in response to a decision adverse to the patentability of a claim of a patent. No proposed amended or new claim enlarging the scope of a claim of the patent

will be permitted in a reexamination proceeding under this chapter. All reexamination proceedings under this section, including any appeal to the Board of Appeals, will be conducted with special dispatch within the Office.

[§ 306] Appeal

The patent owner involved in a reexamination proceeding under the chapter may appeal under the provisions of section 134 of this title, and may seek court review under the provisions of sections 141 to 145 of this title, with respect to any decision adverse to the patentability of any original or proposed amended or new claim of the patent.

[§ 307] Cancellation Certificate of patentability, unpatentability, and claim cancellation

(a) In a reexamination proceeding under this chapter, when the time for appeal has expired or any appeal proceeding has terminated, the Commissioner will issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable confirming any claim of the patent determined to be patentable, and incorporating in the patent any proposed amended or new claim determined to be patentable.

(b) Any proposed amended or new claim determined to be patentable and incorporated into a

patent following a reexamination proceeding will have the same effect as that specified in section 252 of this title for reissued patents on the right of any person who made, purchased, or used anything patented by such proposed amended or new claim, or who made substantial preparation for the same, prior to issuance of a certificate under the provisions of subsection (a) of this section.

The Federal Courts Improvement Act of 1982, § 127, Pub. L. No. 97-164, 96 Stat. 37, provides in pertinent part:

Jurisdiction of the United States Court of Appeals for the Federal Circuit.

(a) The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction.

(1) of an appeal from a final decision of a district court of the United States, the United States District Court for the District of the Canal Zone, the District Court of Guam, the District Court of the Virgin Islands, or the District Court for the Northern Mariana Islands, if the jurisdiction of that court was based, in whole or in part, on section 1338 of this title except that a case involving a claim arising under any Act of Congress relating to copyrights or trademarks and no other claims under section 1338(a) shall be governed by sections 1291, 1292, and 1294 of this title;

(2) of an appeal from a final decision of a district court of the United States, the United States District Court for the District of the Canal Zone,

the District Court of Guam, the District Court of the Virgin Islands, or the District Court for the Northern Mariana Islands, if the jurisdiction of that court was based, in whole or in part, on section 1346 of this title, except that jurisdiction of an appeal in a case brought in a district court under section 1346(a)(1), 1346(b), 1346(e), or 1346(f) of this title or under section 1346(a)(2) when the claim is founded upon an Act of Congress or a regulation of an executive department providing for internal revenue shall be governed by sections 1291, 1292, and 1294 of this title;

(3) of an appeal from a decision of the United States Claims Court;

(4) of an appeal from a decision of
(A) the Board of Appeals or the Board of Patent Interferences of the patent and Trademark Office with respect to patent applications and interferences, at the instance of an applicant for a patent or any party to a patent interference, and any such appeal shall waive the right of such applicant or party to proceed under section 145 or 146 of title 35;

(B) the Commissioner of Patents and Trademarks or the Trademark Trial and Appeal Board with respect to applications for registration of marks and other proceedings as provided in section 21 of the Trademark Act of 1946 (15 U.S.C. 1071); or

(C) a district court to which a case was directed pursuant to section 145 or 146 of title 35;

(5) of an appeal from a final decision of the United States Court of International Trade;

(6) to review the final determinations of the United States International Trade Commission relating to unfair practices in import trade, made under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337);

(7) to review the final determinations of the United States International Trade Commission relating to unfair practices in import trade, made under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337);

(8) of an appeal under section 71 of the Plant Variety Protection Act (7 U.S.C. 2461);

(9) of an appeal from a final order or final decision of the merit Systems Protection Board, pursuant to sections 7703(b)(1) and 7703(d) of title 5; and

(10) of an appeal from a final decision of an agency board of contract appeals pursuant to section 8(g)(1) of the Contract Disputes Act of 1978 (41 U.S.C. 607(g)(1)).

35 U.S.C. § 103(a), entitled "**Conditions for patentability; nonobvious subject matter**," provides in pertinent part:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that are subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

35 U.S.C. § 112 ¶ 1, entitled "**Specification**," provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. § 271(a), entitled "**Infringement of patent**," was amended by Pub. L. No. 103-465 § 533 on December 8, 1994 (effective date January 1, 1996) and provides:

Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.